

**Rocky Mountain** Remediation Services, L.L.C

protecting the environment

Flats Environmental Technology Site PO Box 464 Golden Colorado 80402 0461 (303) 966 7000 Phone



October 29, 1998

98-RF-05376

CORRES CONTROL LTR NO

18-RF -0 5376

70-KF -UU	2.1	$\underline{\mathcal{L}}$
DIST	LTR	ENC
Bengal P	_	_
Benson C A		
Burdelik W J		
Crawford A C		
Cypher N P	X	$\boxtimes$
Dunstan LA		
Fiehweg R E		
Findley M		
Guinn L		
Huffman F M		
Hughes FP		
Jenkins K		
law JE		
Motyl K M		
Primrose A L		
Rukavina F		
Steffen DE		
Wheeler M	X	X
	L	
30YLAU,T	K	X
SINGERSH	X	$\triangle$

Corres Control RMRS CC

CLASSIFICATION CONFIDENTIAL SECRET

Authorized Classifier Signature

**DOCUMENT CLASSIFICATION** REVIEW WAIVER PER

Exemption # CEX-010-98 Date

IN REPLY TO RFP CC NO

**ACTION ITEM STATUS** OPEN PARTIAL

LTR APPROVALS

Orig & Typist Initials

cc

N B Sandlin

D C Shelton

Kaiser-Hill Kaiser-Hill

Kaiser-Hill

Bldg 130

Alan D Rodgers

Division Manager, Waste & Remediation Operations

Kaiser-Hill Company, L L C

Building 130

SUBMITTAL OF THE QUARTERLY WELL STATUS REPORT - MW-175-98

Action None required

A copy of the Well Status Report is attached This report includes the groundwater monitoring summary table and the Rocky Flats Groundwater Sampling Field Database Spreadsheet for the third quarter of the 1998 Groundwater Monitoring Program Please transmit this report to Joseph A Legare, DOE/RFFO

Please contact John Boylan (extension 5182) or Rob Smith of Water Management and Treatment (extension 7898) if you have any questions

Martın Wheeler

Director

Operations Services Division

JAB slm

Attachments

As stated

T G Hedahl Kaiser-Hill Bldg 111 Bldg 850 G H Setlock Bldg T130C

SW-A-004458

RECEIVED

RECORDS CENTER

## DOE GROUNDWATER STATUS REPORT THIRD QUARTER 1998

- A total of 371 water level measurements were completed on program wells. Due to concerns of well access and/or condition, three wells were removed from the water level list and replaced with three to which these concerns do not apply
- A total of 64 wells were sampled, out of a revised 2<sup>nd</sup> plus 3<sup>rd</sup> Quarter total of 122 program wells (See attached table and spreadsheet, the spreadsheet is attached in both hard copy and IBM-format diskette) Of these 64, 7 were resampled for selected analytes to replace samples whose integrity had been compromised due to laboratory error
- 3 No wells were abandoned One surface water (seepage) sampling location was removed from the sampling program the location was eliminated through the installation of a treatment system
- The sampling schedule for several wells was revised based on exceedances reported in a previous quarter. Four monitoring wells in the program, which were previously sampled semi-annually, were sampled monthly for three consecutive months.
- 5 Several special, non-programmatic activities were performed. These included installation and characterization sampling of six new wells surrounding the Building 123 foundation, potentiometric surface characterization of the area around Building 123, installation and characterization sampling of 23 new wells in the North Industrial Area plume, continued characterization sampling of selected wells in the area of the Solar Ponds Plume, and collection of 40 gallons of groundwater from an Eastern Boundary well for treatability studies. Due to a shipping company error that delayed delivery of certain samples past their hold times, the six Building 123 wells were resampled for selected analytes.
- 6 Excluding error-caused resampling such as that described above, the total number of program well sampling events for Fiscal Year 1998 was 215

2

Ory Number of Number of Number of	ilis Water Level Damaged Wells Wells	Measurements Abandoned	Completed** During Quarter	371 0 0 0
Number of Dry	Program Wells			3
Number of	Technically Dry	Wells Not	Developed	0
Number of	Wells Yielding	Partial Studies		8
Number of	Wells Removed	From Program	During Quarter	1
Number of	Wells Added to	Sample Program	During Quarter*	8
Number of	Wells Sampled*			49
Total Number of	Wells in	Monitoring	Program*	122

\*Number reflects sampling events, where each sampling event at a well is counted Number of unique wells is therefore lower, as some wells were sampled more than once in the quarter
\*\*Does not include water levels taken during sampling or for non-programmatic activities

ROCKY FLATS GROUNDWATER SAMPLING FIELD DATABASE														
SPRING SUMMER 1998  MOST WELLS SAMPLED ON A SEMI-ANNUAL BASIS														
Well ID	Grid	Analyte Code	Northing	Easting	# of Visits	Date Purged	First Date Sampled	Full Suite (Y/N)	Depth To Water	Baseline Depth	Total Depth	Depth Diff	Sample ID#	Comments
3.54.	estantigues Estantigues			12		y colored to the second		<b>.</b>			10 TH X 10			
00491	N-8	2	748645	2086807	1	7/13/98	NA	N	11 78	21 64	NA		GW05903TE	REPLACED PUMP NO TD
00597	K 12	8	752145	2083307		7/28/98	7/28/98	Υ	9 91	24 43	24 28		GW05904TE	
00797	L-7	1	747797	2084005	1	7/29/98	7/29/98	Υ	17 10	30 42	30 76		GW05905TE	
00997	P-11	3	751561	2088854	3	7/27/98	7/27/98	Υ	5 76	10 40	14.29		GW05907TE	
0386	U 10	4	750543	2093778	1	8/25/98	8/25/98	Υ	15 41	25 56	NA		GW05913TE	REPLACED PUMP NO TD
0386LR 03991	P-10	2	750401	2088449	1	8/25/98 8/6/98	8/25/98 8/9/98	Y	32 51	41 75	41 77		GW05914TE GW05915TE	
03991	1 -10	-	750-101	2000-13		44.5	0336		32.31	41.75		- Ą.,	OV1038   31E	
04591	P-9	2	749286	2088034	1	8/24/98	8/24/98 7/29/98	Y	43 58	48 64 22 01	48 58		GW05919TE	
0487	L-7	1	747943	2084887		7/29/98	1129/90	1	8 69	22.01	22 03		GW05920TE	
05091	P-9	2	749894	2088825	1	8/26/98	8/26/98	Y	38 69	48 22	48 23		GW05922TE	
05091DUP 05091RS		2				8/26/98	8/26/98	Y	<u> </u>				GW05923TE GW05924TE	
05391	P 10	2	750153	2088298	1	7/7/98	7/7/98	Y	31 50	39 51	39 53		GW05925TE	
05691	0-10	2	750053	2087621	1	7/13/98	7/13/98	N	22 35	39 78	NA		GW05926TE	PUMP IN WELL-NO TD
06491	U-11	4	751193	2093867	1	7/20/98	7/20/98	N	11 59	20 29	20 24		GW05928TE	
07391	M-8	2	748548	2085827	4	8/24/98	8/24/98	Y	8 60	15 58	15 55	4.74	GW05929TE	
10194	Р9	2	749121	2088284	1	7/20/98	7/20/98	N	35 39	54 20	44 86		GW05931TE	
10294 10294LR	U-2	4	742319	2093691	1	7/27/98 7/27/98	7/27/98 7/27/98	Y	3 20	17 00	NA		GW05932TE GW05933TE	PUMP IN WELL NO TD
Black Asserts	S SAN		3 32	. 8 m 5		1121100	1121100		_ 2				OVICEOSCIE	g A leader to the
10394-JULY 10394-AUG	U-4	4	744947 744947	2093664 2093664	1	7/27/98 8/25/98	7/27/98 8/25/98	Y	8 77		12 69		GW05934TE GW06054TE	PUMP TOO SHALLOW: BAILED
103847A00			7-10-0	18,550,200		0/20/90	02330				12 03		3710000412	TOMP TOO STREEDY, BALLED
10692	K-7	1	747745	2083638	2	7/15/98	7/15/98	Υ	4 39	23 70	23 69	_	GW05936TE	
10992	L 7	1	747775	2084780	2	7/18/98	7/18/98	Υ	22 31	33 67	33 61		GW05938TE	
10994	K-7	6	747431	2083266	2	7/14/98	7/14/98	Υ	15 84	21 70	21 84		GW05939TE	
12691	0-9	2	749952	2087419		8/5/98	8/5/98	Y	28 11	67 23	67 19		GW05947TE	
1206 1111 V		-	754000	2022274	3	70.000	7/2 4:00		0.00		40.00		CHARGO	
1386-JULY 1386-AUG	N-11 N 11	5 5	751857 751857	2086051 2086051	3	7/14/98 8/18/98	7/14/98 8/18/98	N	6.39 6.29		12 02		GW06041TE GW06052TE	
ing the same is not	manerw T	:	an e e e	- Makhawata ya ka Linda Lindawaka d						- Aug.			Si de appropriate de	
22596	J-10	7	751266	2082750	1	9/1/98	9/1/98	Υ	NA.	27 00			GW05953TE	WATER BELOW PUMP
	J-10	<b>-</b>	131200	, 2002/30		G 1130	W 1130	<b>-</b>		2,00	140		TOTTO SOUTE	THE TELEVISION FOR

ROCKY FLATS GROUNDWATER SAMPLING FIELD DATABASE SPRING - SUMMER 1998														
MOST WELLS SAMPLED ON A SEMI-ANNUAL BASIS														
WellID	Grid	Analyte Code	Northing	Easting	# of Visits	Date Purged	First Date Sampled	Full Suite (Y/N)	Depth To Water	Baseline Depth	Total Depth	Depth Diff	Sample ID#	Comments
22696	K-11	7	750747	2083516	1	8/31/98	8/31/98	Υ	16 26	19 50	21 71		GW05954TE	
	20.40		A 2000	YLENDON.		- 191 (-5)			00.00	00.00	NIA		CHARLESTE	DUMB 1111511 110 TO
22896 22996	K 10	3	750369 749188	2083393	1	9/1/98 8/26/98	9/1/98 8/26/98	Y	20 90 NA	26 20 11 50	NA NA		GW05956TE GW05957TE	PUMP IN WELL-NO TD WATER BELOW PUMP
23096	N 7	2	747836	2086086	1	8/17/98	8/17/98	Υ	12 52	16 00	17 73		GW05958TE	
\$. (1)	36,	_	1000	-00 (MOX)	201		My .		<u> 1888</u>	23-13 <u>\$</u> .	33.5		181.44 [16]	· · · · · · · · · · · · · · · · · · ·
23296	0-10	2	750683	2087624	1	8/31/98	8/31/98	Υ	5 65	10 00	NA_		GW05960TE	PUMP IN WELL-NO TD
38591	L 7	1	747408	2084659	2	8/18/98	NA	N	10 01	11 84	11 83		GW05968TE	DRY 7/20, DRY 8/18
<u> 1948 - 19</u> 50 (1944 <sup>- 1</sup> 1946	12/2/2011		- 18 8 8 8 8 8 B	215.515/A5	3	0.1494/004	53/5		7.00	. ,4.	2.42		0	Ţ
4087 Q2 41591	L 13 U-8	8	753143 748800	2084823	1	8/25/98 8/27/98	8/25/98 8/27/98	Y	7 82 9 45	15 56	8 40 NA		GW06042TE GW05970TE	REPLACED PUMP NO TO
41591LR		4				8/27/98	8/27/98	Υ					GW05971TE	
11691	U 13	4	753470	2093851	1	7/30/98	7/30/98	Y	10 42	19 44	NA	· 	GW05972TE	PUMP IN WELL-NO TD
13392	1-8	7	748034	2081537	2	7/22/98	7/22/98	N	28 98	35 38	35 43	L	GW05973TE	DDV 840 DDV 600
4787 4887	L 7	1	747779 747829	2084903 2084691	1	9/22/98 8/17/98	NA 8/17/98	N	11 51	9 80 12 37	12.21		GW05075TE	DRY 8/18, DRY 9/22 WELL KINKED
				o ta Pila		100							4.4	
52894 Q2	M-13	8	753222	2085099	3	8/25/98	8/25/98	Υ	5 28		8.27		GW06045TE	
52994 Q2	M-13	8	753196	2085085	1	8/17/98	NA	N	19 68	0.117	20 96		GW05977TE	DRY 7/8, DRY 8/17
3234 3324			100100	4 -4	2.4	J. 184					20 00		0710001112	DICE NO, DICE OFF
5887 Q2	J-12	8	752234	2082531	1	8/31/98	8/31/98	Υ	10 31		NA		GW06043TE	PUMP IN WELL NO TO
6186	К9	7	749198	2083717	3	8/18/98	8/18/98	Υ	10 10	13 83	13 87		GW05982TE	
528 <del>6</del>	M-8	2	748143	2085725	1	7/8/98	7/8/98	N	27 56	36 88	36 85		GW05983TE	WELL BENT
6386 6486	M-8 M-7	1	748145 747672	2085753	1	7/14/98 7/14/98	7/14/98 7/14/98	Y	10 01 8 92		17 09 11 41		GW05984TE GW05985TE	
3460 (**)	IVI-/		14/0/2	2065610		// 14/96	1114/96		0 32	1140	1141		GAA038031E	
3586-JULY	0-7	2	747881	2087501	1	7/28/98	7/28/98	Υ	8 35				GW05986TE	PUMP IN WELL-NO TD
8586-AUG	0-7	2	747881	2087501	1	8/24/98	8/24/98	N	NA		NA		GW06053TE	WATER BELOW PUMP
70193 Q2	J 12	8	752688	2082674	1	7/14/98	7/14/98	N	10 71	· · · · · · ·	41 55		GW05987TE	}
70193DUP	3 12	8	732000	2002014		7/14/98	7/14/98	N	10 / /		7, 50		GW05988TE	
70193RS		8				7/14/98	7/14/98	N					GW05989TE	
70202 00	1.40	C	750000	0000000	1	0.000.00	00000		0.05				CIANECOOTE	DUMB IN MELL MARINE
70393 Q2 70393LR	J-12	8	752090	2082389		8/26/98 8/26/98	8/26/98 8/26/98	Y	9 65				GW05990TE GW05991TE	PUMP IN WELL NO TD
8 14 15 E	d se		4.5	na jedniga		. 1/4				\$1.3.3				
70493 Q2	J 12	8	752111	2082390	2	8/19/98	8/19/98	Υ	8 95		48 01		GW05992TE	
7086	J 7	8	747491	2082003	1	7/28/98	7/28/98	Y	4 86	9 94	NA 14.02		GW05993TE	PUMP IN WELL NO TD
75992 76992	N-10 L 12	8	750290 752561	2086628	2	7/7/98 7/8/98	7/7/98 7/8/98	N	7 91 10.27	14 02 14 40	14 03 14 38		GW05994TE GW05995TE	WENT DRY - NO U-ISO
V. 2		İ	102001	X, 200	· y. ·					14.4				
Madia service	÷		Willed and		2				<u> </u>	16.50			S. 18 18 18 18	
3206989, Q2	L 13	8	753145	2084835	3	8/25/98	8/25/98	Υ	21 60	i kan	24 32		GW06048TE	
Pagaran Pagaran				20012860 20012860										

	ROCKY FLATS GROUNDWATER SAMPLING FIELD DATABASE													
<u></u>	SPRING SUMMER 1998  MOST WELLS SAMPLED ON A SEMI-ANNUAL BASIS													
Well ID	Grid	Analyte Code	Northing	Easting	# of Visits	Date Purged	First Date Sampled	Full Suite (Y/N)	Depth To Water	Baseline Depth	Total Depth	Depth Diff	Sample ID#	Comments
							npied	ج	9	\$				
Biskursia.			5 (C. ) \$		187				25					
P114389-JULY	1 10	7	750990	2081739	2	7/21/98	7/21/98	γ	7 34		17 79		GW06000TE	
P114389-AUG	1-10	7	750990	2081739	2	8/18/98	8/19/98	N	7 28		17 80		GW06055TE	
9430 E. C.			40,493	1.5 A. 1.5 C.		1.00		ş!	er ja	+ 1 -			er de ji al	
P209389	L 10	5	750884	2084130	2	8/31/98	8/31/98	Υ	18 70	32 10	32 12		GW06002TE	
(2) (0.18).	الحلقة		20/25			25000			1833		2.51		<u> </u>	·
P313589	K-8	7	748510	2083547	2	7/21/98	7/21/98	Y	8 29	1571	+	<del></del>	GW06009TE	
P314289	K-8	7	748216	2083280	3	7/21/98	7/21/98	N	12 46	16 71	16 72		GW06010TE	NO TDS (INSW)
891COLWEL Q2	1.0				1	NA	8/20/98	Υ	NA		NA		GW08050TE	COLLECTION WELL
891COLVVEL Q2	L-0					N/A	0/20/98	'	INV		144		GWOODDIE	COLLECTION WELL
891COLGAL Q2	1.7				1	NA	8/20/98	Y	NA		NA		GW06051TE	COLLECTION WELL
	, <u>, , , , , , , , , , , , , , , , , , </u>						0/2W98		NA.		NA		SHOODITE	
3 2 2 2	K-8		0.84 (44 )		1		8/19/98	У			NA			SURFACE WATER SITE
SW13494 Q2	K-8				1	NA NA	8/19/98	Υ			NA		GW06049TE	SURFACE WATER SIT

Grey fill Wells sampled early in semi annual cycle

Date purged Date well was purged

First date sampled First date samples were collected from well ("DRY" if dry)

Full suite Was full suite of analytical samples collected?

Depth to water Measured depth to water ("DRY" if dry)

Baseline depth Baseline total depth (as constructed)

Total depth Measured total depth

Depth diff Difference between baseline total depth and measured total depth

Sample ID # Assigned RFETS sample number

NA Not applicable
WELL NUMBER SUFFIXES.
LR Lab replicate
DUP Duplicate
RS Equipment rinse

Q1 Well is sampled quarterly rather than semi-annually sample is for second quarter of the 2-quarter semester
Q2 Well is sampled quarterly rather than semi-annually sample is for first quarter of the 2-quarter semester

(Month) Well was sampled monthly for a several-month period month suffix designates to which month sample corresponds